

CRANEFRIGOR™ - Cooling for containers, crane cabins, and control cabinets

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CRANEFRIGOR™ Container cooling units / control cabinet cooling units	CC02	CC05 /	CC08	ТҮ
Length Dimensions [mm] Width Height	415 506 1.127	608 997 1.640	998 763 2.200	670 530 1.600
Weight approx. [kg]	90	280	450	180
Nominal cooling capacity [kW] ^{1) 2)} with R134a / R513A	3,4	5,8	11,4	6,4
Heating capacity [kW] ²⁾	-	2,3	5,0	4
R134a CO ₂ -equivalent [kg] R513A R450A	2.002 883 —	3.146 1.388 1.331	5.720 2.524 2.420	3.289 1.451 1.391
Air flow rate, free blowing [m³/h]	1.500	1.200	2.000	1.000









CRANEFRIGOR™ Crane cabin coolir	ng units	0C02	TW	OC07	ТХ
Dimensions [mm]	Length Width Height	600 600 600	1.050 730 630	880 460 2.140	670 530 1.600
Weight approx. [kg]		90	140	230	180
Nominal cooling capac with R134a / R513A	city [kW] ^{1) 2)}	3,5	4,6	6,6	6,4
Heating capacity [kW]] ²⁾	2,3	3,5	6,9	4
CO ₂ -equivalent [kg]	R134a R513A R450A	2.002 883 -	3.003 1.577 1.512	2.860 1.262 1.210	3.289 1.451 1.391
Air flow rate, free blow [m³/h]	wing	850 ³⁾	800 ³⁾	1.000 ³⁾	1.000 ³⁾

 $^{^{1)}}$ At 27 °C indoor temperature, 52 % rel. indoor air humidity and 35 °C ambient temperature

³⁾ controllable

controllable	
Subject to technical change.	

Refrigerant Type:	GWP value:	Area of application:
R134 a	1.430	Up to 70°C
R513A	631	Up to 70°C
R450A	605	Up to 85°C

²⁾ 400 V / 50 Hz (additional operating voltages available)









DV Split

916 - 2.116 908 270

35 – 91

10 - 30

3 – 6

1.850 - 6.420

CK12 / 18 / 24			
1.048	1.148	1.148	
638	838	838	
1.845	1.945	1.945	
410	480	510	
12,3	19,5	24,2	
	6,9		
11.440	13.585	18.590	
5.048	5.994	8.203	
4.840	5.747	7.865	
2.500	3.500	4.000	

CK10 / 16 / 22 / 30			CVD Split	
2.132 1.200 960			854 1.200 912	
590	610	620	620	290
17,9	26,6	31,4	33,5	10 – 20
6,2/12,3			-	
12.870 5.679 5.445	20.020 8.834 8.470	24.310 10.727 10.285	25.740 11.358 10.890	-
3.500	4.300	6.800	7.000	-







Filter device	Condensate evaporator	Condensate evaporator
FT15	KVW wall mounting	KV floor and wall mounting
370 370 480 - 1.170	605 152 217	1.062 195 348
Voltages: 24 V DC, 115 V, 230 V	20	30
Possible filter class: G2/G3, M5/F7, chemical filters, activated charcoal filter	-	-
-	2,3 - 3,5	2,3 - 3,5
-	-	-
Volume flow [m ³ /h] ³⁾ : 100-400	-	-





The FrigorTec GmbH is certified with DIN EN ISO 9001 : 2015. TÜV acceptance testing in our plant. An additional test at the installation site is not usually necessary for the CRANEFRIGOR™ compact device.



CRANEFRIGOR™ - Air conditioning units, custom-made and in serial production

For over 60 years, FrigorTec has produced crane air conditioning units for container terminals and harbours, as well as for hot areas, such as foundries, steel works, and mills. On the one hand, the devices create optimal working conditions in the cabin for crane drivers; on the other hand, they ensure reliable room temperatures for sensitive performance and control electronics. The devices, which have been put to the test worldwide, are available in many installation variations and with various output stages.

CRANEFRIGOR™ air conditioning units for cooling containers, crane cabins, and control cabinets, have been specially developed for use in harbours and container terminals. The compact and robust design, and the materials used, make them perfectly suited for small installation spaces, salty air, and constant vibrations. Compact or split devices are also used depending on the profile of requirements.

In the case of a split device (Fig. 1), the condenser unit is installed outside the space to be cooled, with the air conditioning unit inside. The two devices are connected by refrigerant lines. The air conditioning unit is positioned directly above the heat source, making it especially effective.

A wide range of individual component combinations allow for an exact output adjustment.

Container/control cabinet cooling

The air conditioning unit is mounted externally on the container wall (Fig. 2). The spatial conditions determine whether a vertical or horizontal design is chosen. In both cases, the





Fig. 1 Procedural principle for container cooling

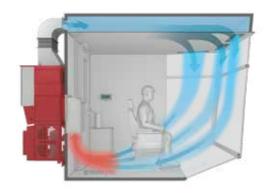
Fig. 2 Procedural principle for control cabinet cooling

device blows cool air from below into the space. At the top, the heated air is sucked in through a fan and extracted. The air conditioning unit for the control cabinet cooling is mounted directly on the control cabinet. A simple air distribution is also supplied in the case of large or long control cabinets.

Crane cabin cooling

The air conditioning unit for crane cabin cooling is mounted directly on the cabin wall (Fig. 3). It operates very quietly and is easy to operate. In the case of cooling, cold supply air flows underneath the ceiling into the crane cabin. In the case of heating, warm supply air flows above the floor. This provides optimal comfort for the crane driver.

Fig. 3 Procedural principle for crane cabin cooling



Advantages with FrigorTec air-conditioning units:

- Comfort and safety thanks to air conditioning in the cabin, control cabinet and electronics compartment
- Safe operation under extreme dust and heat loads
- Effective corrosion protection thanks to the sturdy industrial design and protective coating
- Adapted air flow and optimum temperature distribution
- Industrial components with a long service life for continuous 24/7 operation

CRANEFRIGOR™ air conditioning units for container/control cabinet and crane cabin cooling

In harbours and container terminals work is often done under extreme conditions:

- · high ambient temperatures
- · very high air humidities
- a high level of direct sunlight
- salty air
- high level of exhaust pollution
- high noise levels
- vibrations

Air conditioning units from FrigorTec achieve a good working environment for your employees even under these extreme conditions. In this way, normal operations and all logistics processes can be carried out safely and efficiently.

Cooled air for man and machine

The guidelines for workplace conditions are met by air conditioning the crane cabin. Your employees work under comfortable, performance-enhancing conditions.

Likewise, the sensitive crane control units have to be reliably cooled – operation reliability depends on this during normal operations and logistic processes.

High performance and variable installation – individually designed for your application profile

Air conditioning units from FrigorTec come in a wide product range, with a concise differentiation of specific performance features. We choose the exact device to fulfil your individual needs on location.

Your benefits:

- reliable cooling at ambient temperatures of up to +90 °C
- robust construction
- split designs allow for a variety of installation options
- versatile electrical arrangements regarding voltage, frequency, and current type

Tried and tested

The calculated performance data for the devices is tested in our technology department.

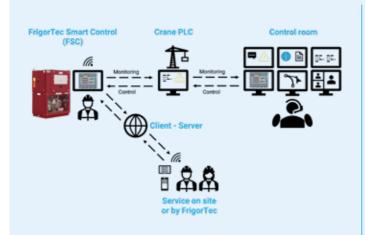
In this way, FrigorTec has produced air conditioning units for container/control cabinet and crane cabin cooling for over 60 years. Our devices are used successfully in more than 100 countries.







Our air conditioning units for container, control cabinet, and crane cabin cooling are used for the most diverse and challenging requirements in harbours and container terminals all across the world.



The FrigorTec Smart Control FSC allows monitoring and management of the crane air-conditioning units and can be easily integrated into the respective control systems.



Advantages of the FrigorTec Smart Control system:

- Remote control
- Monitoring and remote maintenance
- Temperature regulation
- Humidity regulation
- Comfort mode
- Pressure monitoring
- Redundant operation
- Network connection
- Predictive maintenance

We pass on only what we have produced by our own hands.



In the main plant in Amtzell, Germany all products made by FrigorTec GmbH are developed, constructed and produced. Every device passes a quality inspection with test runs before delivery. FrigorTec solutions are sold in over 100 countries through our worldwide distribution network.



Grain cooling GRANIFRIGOR™ Crane air conditioning CRANEFRIGOR™

Standard cooling STANDARDFRIGOR

FrigorTec SERVICES

Insect heat treatment DEBUGGER

Hay dryer AGRIFRIGOR™

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